

## CLAIMS

Having thus described the invention, what is claimed is:

1. An assay for determining the concentration of endogenous lactoferrin, said assay comprising:

obtaining a human fecal sample;  
diluting said fecal sample;  
contacting said sample with immobilized polyclonal antibodies to endogenous lactoferrin to create a treated sample;  
contacting said treated sample with enzyme-linked polyclonal antibodies to create a readable sample;  
determining the optical density of said readable sample at 450 nm;  
generating a purified lactoferrin standard curve; and  
comparing said optical density of said readable sample to said standard curve to determine the concentration of endogenous lactoferrin in said fecal sample.

2. The assay as recited in claim 1, wherein said step of diluting said fecal sample comprises diluting said sample by serial ten-fold dilutions.

3. A kit for distinguishing irritable bowel syndrome from inflammatory bowel disease by testing a fecal sample from a person to be diagnosed, the kit comprising:

one or more microassay plates, each said plate containing immobilized polyclonal antibodies to human lactoferrin;  
enzyme-linked polyclonal antibody to human lactoferrin; and  
enzyme substrate for color development.

4. The kit as recited in claim 3, further comprising purified human lactoferrin as a positive control.

5. The kit as recited in claim 4, further comprising a stop solution for quenching the reaction.

6. A method for monitoring a patient having inflammatory bowel disease, the method comprising:

obtaining a first fecal sample from the inflammatory bowel disease patient at a first time;

determining the concentration of endogenous lactoferrin in said first fecal sample to obtain a first lactoferrin concentration;

obtaining a second fecal sample from the inflammatory bowel disease patient at a second time later than said first time;

determining the concentration of endogenous lactoferrin in said second sample to obtain a second lactoferrin concentration; and

comparing said first lactoferrin concentration to said second lactoferrin concentration to evaluate any differences therebetween.